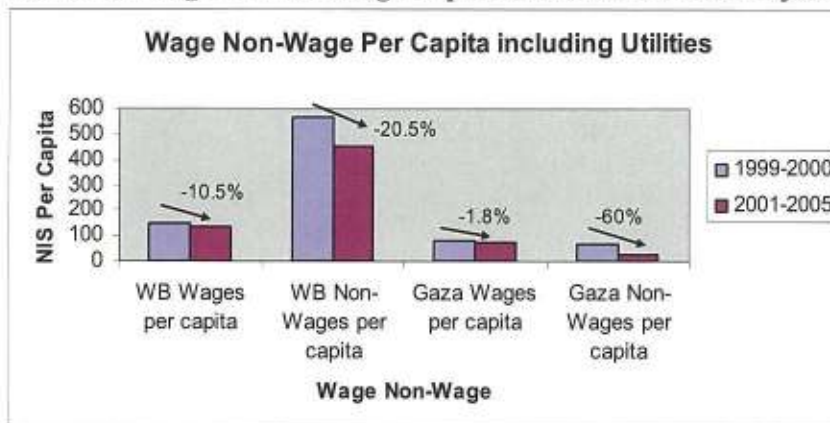


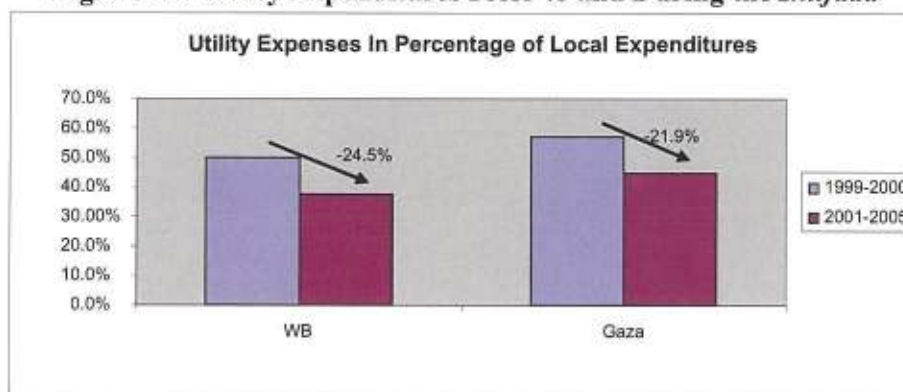
# EXHIBIT A.206

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**Figure 4.5: WBG Wage and Non-wage Expenditures in Pre- and *Intifada* Periods**

Source: World Bank Municipal Finance Survey 2006.

**Municipal Utility Services and the “Free Rider” Problem.** Nonpayment of utility bills threatens the intergovernmental system in the West Bank and Gaza. In prior years, shared revenues were withheld by MOF to pay utility service debts, which were deducted by Israeli suppliers from the monthly clearance revenue that it collects and is expected to transfer to the PA. In 2002, the MOF introduced a new policy. Debts had become a critical issue—they rose from about NIS 68 million in 2000 to nearly NIS 170 million in 2002. The ministry announced that it would reinstate central transfers, but that it would intercept the funds of municipalities in arrears. The intercept provided an incentive for payment in smaller municipalities where transfers were greater than or equal to debt (see Figure 4.6). In larger municipalities, however, transfers represented only a fraction of their debts and the intercept failed. The ministry was only able to recover about NIS 18 million in 2004, a figure dwarfed by the mounting debts. Today, the suspension of clearance transfers from the Israeli government has left the PA without any such policy instrument.

**Figure 4.6: Utility Expenditures Prior to and During the *Intifada***

Source: World Bank Municipal Finance Survey 2006.

**Declining Utility Revenues.** With the decline of revenue from utilities, public service functions and market services require other funding. West Bank and Gaza municipalities

have met this challenge in different ways in response to local conditions. This situation indicates local flexibility, but it also creates inconsistencies. Differing practices in revenue collection lead to many fees in the marketplace. Practices must be standardized as this expenditure grows.

#### **Box 4.2: Pre-paid Metering Systems: A Way to Address Arrears?**

Pre-paid metering (PPM) systems operate in more than 40 countries around the world. In the United Kingdom and South Africa, this new approach covers 3 million and 2 million users respectively. Other countries are in the pilot phases, with between 100 and 100,000 meters in place. PPM systems are now mature (we know their advantages and disadvantages through testing experiences) and PPM markets are growing internationally. PPM systems have been applied to electricity, water, gas, telephone, and cell phone services. Locally, the Jerusalem Electricity Company (JEC) introduced a successful pilot program.

**Why introduce pre-paid metering?** Pre-paid metering systems have been introduced for a variety of reasons, revenue recovery first among them. Many sources also cite improved customer service. Elimination of billing, mailing, and meter readings lowers costs. Other payment systems also give inherent subsidies to some while raising the costs to all. Removing these subsidies would allow providers to pass on savings. For example, PPM systems eliminate the need for credit control, provisioning for bad debt and legal and technical services for disconnection and reconnection—costs built into recovery charges and tariff rates.

**Improved energy and water conservation.** From an energy conservation and household expenditure perspective, PPM systems encourage users to manage consumption better—a benefit in a resource-scarce region. Customers control their usage and can save money through monitoring consumption. Initially, PPM systems lead to revenue declines due to lower consumption, but system losses decrease as well, allowing greater coverage.

**Reduction of bad debts.** Providers have noted dramatic declines in bad debts where they have introduced PPM systems. They also note improved cash flow. Payment in advance leads to improved relations with customers. Customers prefer pre-paid metering's flexibility and open system approach—they can purchase electricity at any time and in any quantity. No deposits are required.

**Improved means of targeting the poor through the elimination of costs and subsidies.** Through a range of new payment options and smart technologies, PPM helps central or local governments provide targeted subsidies (in-kind support for electricity service to the poorest). Magnetic cards, smart cards, memory cards, keypad tokens and smart tokens—all convert payments into service.

**Implementation.** A pilot strategy, initially involving no more than three municipalities, would draw on lessons learned from the Jerusalem District Electric Utility Company. The strategy would consider the most appropriate technologies, customer preferences, technical specifications, public awareness requirements and so on. Policy issues will arise, such as whether to make pre-paid metering free choice or forced use. Most successful PPM pilots have included external and internal marketing campaigns to raise awareness. They also require training, restructuring of management processes, and installing new meters, all of which are included in the proposed pilot budget.

## **5. Accountability Measures and Sector Oversight**

**Weaknesses in the Regulatory Framework.** Due to its informal beginnings, the local government sector operates without a guiding framework for accounting and financial management. Local governments operate without a unified chart of accounts. With



revenues and expenditures recorded in a different manner at different municipalities, data aggregation at the sector level becomes impractical and unreliable. This shortcoming compromises regulatory oversight. In addition, while the General Accounting Office of MOLG carries out audits, no reports are prepared and their findings remain undisclosed. Guidelines for local budgeting and financial management are desperately needed to define common management principles: planned/executed budget formats, standard balance sheets and revenue-expense and cash-flow statement templates.

***Need for Accountability in Local Government.*** Accountability at the local level has been nearly non-existent. In response to donor requests, the PA held local elections for the first time in over 30 years. Elections place checks on public officials—they can be replaced or removed if they are not responsive to their constituencies. However, other measures are needed. A recent special purpose audit revealed irregularities in local accounting and financial management.

#### **Box 4.3: 2005 Special Purpose Audit of Local Governments**

With World Bank support, the Ministry of Local Governments carried out a special purpose audit of five municipalities. The aim was to observe financial practices and internal control procedures to assess accounting standards. The audit was carried out by a reputable local firm.

The audit sheds light on shortcomings in the accounting, budgeting and financial reporting practices of local governments, even the more advanced ones. No formal financial procedures have been established in any of the municipalities, nor are standard procurement procedures applied. In the absence of a standard, unified chart of accounts, each municipality records its transactions differently, making it difficult to aggregate data and implement policy. Accounts from past years—some dating back five years or more—remain open and have been modified well after the standard period. Some accounts did not reconcile with existing records. Standard control procedures, including segregation of duties, are not commonly observed.

Local governments have continued to suffer from their informal, piecemeal beginnings, even after the establishment of the PA and the Ministry of Local Governments. The absence of a unified chart of accounts and standard financial and procurement policies represents a serious gap that needs to be addressed soon to improve local financial management.

***Using Service Delivery Surveys to Improve Accountability and Expenditure Management.*** Service delivery surveys (SDSs) could improve accountability in the relationship between the service provider and the end user, leading to better investment planning and expenditure management. Nationally, such surveys can inform decisionmakers about user views on coverage, services and provider choices. Locally, they can provide vital information about service delivery and local priorities.

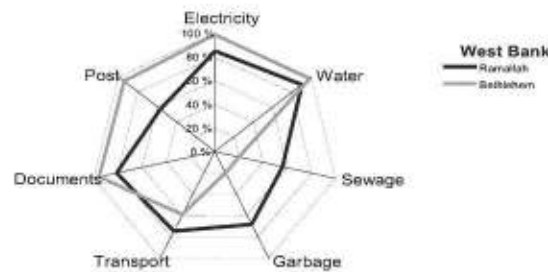
The World Bank, with the assistance of the Norwegian Social Science Research Institute, carried out a service delivery survey in the West Bank between March and June of 2005. The survey consisted of a series of focus groups in Ramallah and Bethlehem. Sixty providers and users were interviewed in each city. The survey assessed satisfaction with local services and service providers. Complementing these discussions, a transect survey—100 interviewers from a random selection of city residents—verified key findings.

The surveys suggested that Palestinians are more satisfied than those queried in Egypt, Iran, Morocco and Yemen—perhaps an implicit acknowledgement that providers do their best in a difficult environment. Findings confirm acceptance of current institutional arrangements where postal, water and sanitation services are provided through national agencies, while electricity and solid waste collection are provided through the private sector and local governments respectively. Public transport, provided solely through the private sector, is generally deemed acceptable. Respondents were open to private services in other areas, but price remained the dominant consideration.

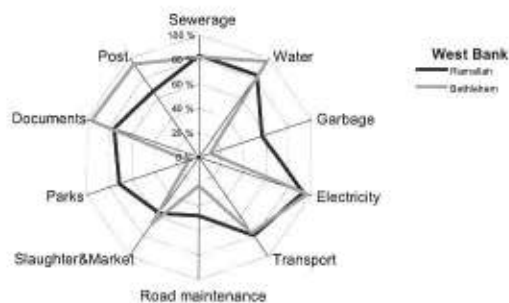
Road maintenance, a local responsibility, received significant negative responses. Respondents acknowledged that roads have been exposed to damage in the ongoing conflict (particularly tank treads). But respondents also wanted greater local engagement in maintenance (figure 4.7).

**Figure 4.7: Satisfaction with Service Providers, Type of Service and City**

Percent of respondents who say personnel are well informed, competent, polite and easily accessible



Percent of respondents who are very or somewhat satisfied with service provision by service area.





## 6. Conclusion

Palestinian municipalities have many impressive accomplishments, especially in customer satisfaction. Yet much work remains to improve efficiency and reduce the burden of municipal finances on the broader PA budget. Specific steps will aid this process (box 4.4).

### Box 4.4: Policy Recommendations for Reforming Intergovernmental Fiscal Relations

#### *Legal and Regulatory Framework*

- Revise laws on fiscal relations and eliminate “claw back” clauses that limit local autonomy. (medium term)
- Institute a classification system that recognizes asymmetries in local capacity and realigns assignments accordingly. (medium term)

#### *Policy Formulation and Coordination*

- Create an intergovernmental fiscal policy commission comprising the Ministry of Local Government, Ministry of Finance, Ministry of Planning, MDLF and other relevant bodies to coordinate fiscal policy, transfer implementation and take necessary remedial measures. (short term)
- Develop a new equalization grant system to address horizontal imbalances in local tax base and resources. (medium term)

#### *Budget Preparation and Review*

- Adopt guidelines for local budgets to standardize preparation and reporting formats and institutionalize local process in the national cycle. (short term)
- Encourage the Ministry of Local Government to review budget plans and report its findings. (short term)

#### *Central Government Oversight*

- Establish a local government finance database to monitor sector performance to improve policy responsiveness. (short term)
- Issue an annual public domain report that reviews local fiscal performance. The report should include annual trends, expenditure and revenue data and standard monitoring ratios. (short term)

#### *Local Revenue Collection*

- Assess tax administration to develop reliable revenue sources for local governments. (medium term)
- Review the pilot pre-paid metering schemes and consider expansion into other municipalities. (short term)
- Transform the MDLF’s emergency assistance grants into performance-based grants conditioned on improvements in revenue collection. (medium term)

#### *Governance and Accountability*

- Publish executed and planned local budgets in print and online.
- Institute external auditing of municipal accounts and monitor implementation.

## References

IMF (International Monetary Fund). [Date?]. *Central Government Budget Figures*.

IMF. 2006. *Government Finance Statistics Yearbook*.

Law on Local Authorities. 1997.

Ministry of Local Government. 2003. *Report*

Ministry of Local Government and UNDP (United National Development Programme). 2004. *Diagnostic Report*.

El-Daher, Samir. 2000. Specialized Financial Intermediaries for Local Governments: A Market Based Tool for Local Infrastructure Finance. Urban Note FM-8d, Infrastructure Notes. World Bank, Urban Sector, Washington, D.C.

UNDP. 2004.

World Bank. 2006. *Municipal Finance Survey*.

World Bank. 2000. *Sector Report*.

## CHAPTER 5: THE EDUCATION SECTOR

### 1. Key Issues and Challenges

The education sector in the West Bank and Gaza is at an important turning point. In spite of the harsh conditions in which schools have had to operate, impressive achievements have been made during the past five years. The system has experienced massive expansion and attained equitable access, reaching a level of development that by most accounts is comparable with middle-income countries. Enrollment in basic education is universal, and the enrollment rate for secondary education is above 80 percent. These figures put the West Bank and Gaza in the lead in the MENA region. Equally important is the high enrollment rate in tertiary education—above 40 percent for the 18–24 age group—which is even high when compared with middle-income countries. To the Palestinian Authority's credit, access to basic and secondary is highly equitable with respect to gender, location, refugee status and household income.

The introduction of a new curriculum in a short period of time and the availability of the corresponding textbooks for all children in all schools has also been a remarkable achievement. The fact that for the first time in 2003 Palestinian children participated in international tests and scored above the average for MENA countries is another major accomplishment. In terms of teacher training, there have also been impressive results. Since 2000 almost every teacher in West Bank and Gaza has been provided with opportunities for training.

A major challenge lies ahead in building on these achievements and consolidating recent gains. Although almost all children up to the age of 12 are attending school, the quality of education is variable. This is to a certain extent expected, as the regular pattern is to move from reaching massive levels of participation (which West Bank and Gaza has clearly achieved) to addressing concerns about quality and equitable access.

To achieve these new qualitative goals, it will be necessary to introduce key policy changes. Education spending will need to shift from classroom construction, textbook procurement and the recruitment of more teachers towards a more sophisticated set of policies aimed at implementing more modern pedagogical methods and practices, introducing improved monitoring and evaluation and developing a comprehensive strategy for human resource management.

There are also areas where education spending can be made more efficient. A closer look at the demographic profile, for example, reveals that it may no longer be necessary for the PA to recruit thousands of teachers each year to keep up with population growth. The profile of staff recruited into education should place more emphasis on front line service delivery staff and less on administrative and support staff.



## 2. Public Funding of Education

Education expenditures have been increasing in the past five years. Although unit costs for the provision of basic schooling in West Bank and Gaza are high compared to neighboring countries, government funding for education as a share of national income is low by regional and international standards (table 5.2). Total education expenditure as a percentage of GDP has increased in the past three years, from 7.5 percent in 2000 to 11.5 percent in 2003. However, the government's share of total education expenditure fell from 42 percent in 2000 to just 34 percent in 2003. Private funding has been increasing and has reached 46 percent of all education expenditure (including tertiary education). The United Nations Relief and Works Agency (UNRWA) accounts for 20 percent of total expenditure and enrolls 25 percent of students in basic education.

**Recurrent Expenditure.** Most public funding for education and training is allocated to the Ministry of Education and Higher Education (MOEHE). Other ministries also provide education and training services, most notably the Ministries of Social Welfare, Labor and Ex-Prisoners. MOEHE's share of total public funding is high by international comparisons. PA expenditures for education increased from 15 percent in 2000 to 17.9 percent in 2003. The total recurrent budget for the MOEHE was NIS1306.3 million (\$290.3 million) in 2004.

The bulk of these resources—around 90 percent—are allocated for salaries, which are paid directly by the Ministry of Finance. In nominal terms, the MOEHE salary budget has increased by nearly 80 percent since 2000. The number of government teachers increased by 36 percent between 1999/2000 and 2004/05.

The functional breakdown was 89.3 percent salaries, 5.3 percent school operational expenditures, and 5.4 percent university support. Around two-thirds of non-salary recurrent expenditure is allocated to textbooks and examinations. The MOEHE non-salary operational budget allocated by the Ministry of Finance was halved in 2005, severely limiting their capacity to provide the educational system with the resources needed for the provision of quality services. The rapidly increasing wage bill for government teachers has crowded out operational funding for schools.

**Investment Expenditure.** MOEHE's donor partners have funded the bulk of capital expenditure since 2000. A total of 266 schools and 7,350 classrooms were constructed between 1994/95 and 2005. The MOEHE was directly responsible for the construction of 118 new schools, 44 percent of them in the West Bank, and 2,675 classrooms (36 percent in the West Bank). NGOs and local communities built the remainder. In contrast, UNRWA construction expenditure on schools has been minimal in the past five years. Unit costs for school construction are 60 percent higher in the West Bank than in the Gaza Strip (averaging \$350 per square meter versus \$220), which points to regional inequities in school infrastructure expenditure. Schools in Gaza are generally cheaper to build because they are constructed on flat land from concrete rather than stone, and labor costs are appreciably lower.

**Table 5.1: National Expenditure Indicators for Education, 2000–03**

|   | 2000 | 2001 | 2002 | 2003 |
|---|------|------|------|------|
| Government expenditure on education as a percent of total expenditure on education    | 42.3 | 32.2 | 34.5 | 33.9 |
| Government expenditure on education as a percent of total government expenditure      | 15   | 12.4 | 11.6 | 17.9 |
| Education expenditure as a percent of Gross National Income                           | 6.3  | 9.7  | 7.4  | 10.7 |
| Education expenditure as a percent of Gross Domestic Product                          | 7.5  | 9.8  | 9    | 11.5 |
| Household expenditure on education as a percent of total annual household expenditure | 3.3  | 5.8  | 6    | 6.1  |

Source: Palestinian Central Bureau of Statistics, National Accounts Department.

**Table 5.2: International Comparisons of Public Expenditure on Education, 2001**

|                          | As a percent of total government spending | As a percent of GNP |
|--------------------------|---|---------------------|
| <b>Country/region</b>    |   |                     |
| West Bank & Gaza         | 17.9                                      | 3.6                 |
| Israel                   | n.a                                       | 7.6                 |
| Jordan                   | 20.6                                      | 4.6                 |
| Lebanon                  | 11.1                                      | 2.8                 |
| Morocco                  | n.a                                       | 5.2                 |
| Syria                    | 11.1                                      | 4.2                 |
| Tunisia                  | 17.4                                      | 7.2                 |
| <b>Median values</b>     |   |                     |
| Developed countries      | 11.6                                      | 5.1                 |
| Developing countries     | 14.8                                      | 4.2                 |
| Arab region              | n.a                                       | n.a                 |
| East Asia and Pacific    | 15.3                                      | 3.6                 |
| Latin America            | 13.4                                      | 4.6                 |
| North America and Europe | 11.6                                      | 5.6                 |
| South and West Asia      | 13.4                                      | 3.3                 |
| Sub-Saharan Africa       | n.a                                       | 3.4                 |

n.a: not available

Note: West Bank & Gaza figures are for 2004.

**Table 5.3: Ministry of Finance Non-Salary Recurrent Budget Allocations**  
(NIS millions)

| Ministry                           | 2003  | 2004  | 2005  |
|------------------------------------|-------|-------|-------|
| Education                          | 122   | 142   | 60    |
| Health                             | 180   | 293   | 190   |
| Ex-detainees                       | 82    | 123   | 75    |
| Social Welfare                     | 198   | 275   | 113   |
| President's Office                 | 322   | 120   | 53    |
| Interior                           | 137   | 191   | 102   |
| Finance                            | 26    | 24    | 9     |
| NGOs                               | 30    | 37    | 7     |
| All PA                             | 1,461 | 1,993 | 1,026 |
| Education as a percentage of total | 8.3   | 7.1   | 5.8   |

Source: Ministry of Finance.

**Table 5.4: MOEHE Recurrent Expenditure, 2000–05**  
(NIS millions)

|                                       | 2000         | 2001         | 2002         | 2003           | 2004           | 2005           |
|---------------------------------------|--------------|--------------|--------------|----------------|----------------|----------------|
| <b>Salaries</b>                       | 690          | 758.5        | 817.8        | 922.5          | 1,118          | 1,226.7        |
| <b>School operational expenditure</b> |              |              |              |                |                |                |
| Textbook printing                     | 21.2         | 2.4          | 34.2         | 31.8           | 32.2           | 35.1           |
| Examinations                          | 9.1          | 10.7         | 11.3         | 12.9           | 13.8           | 15.5           |
| Rent                                  | 4.6          | 5.5          | 5.6          | 5.6            | 5.7            | 7.7            |
| Transportation                        | 1.6          | 1.1          | 0.7          | 1.8            | 2.4            | 2.4            |
| Water and electricity                 | 4.8          | 5.2          | 2.7          | 6.2            | 6.1            | 7              |
| Telephone                             | 2            | 2.3          | 1.1          | 2.6            | 2.3            | 2.5            |
| Maintenance                           | 1.6          | 0.2          | 0.3          | 0.5            | 3.2            | 0.5            |
| Illiteracy                            | 0.5          | 0.6          | 0            | 0              | 0              | 0              |
| Subtotal                              | 47.7         | 53.8         | 57.2         | 64.4           | 68.6           | 73.5           |
| <b>Other recurrent expenditure</b>    |              |              |              |                |                |                |
| Social welfare                        | 17.7         | 18.7         | 24.8         | 37.7           | 46.9           | 61.6           |
| Universities support                  | 7.5          | 8.5          | 8.5          | 63.4           | 71.1           | 100            |
| Presidential awards                   | 0            | 0            | 1.5          | 1.5            | 1.8            | 2              |
| Subtotal                              | 17.7         | 18.7         | 26.3         | 102.5          | 119.5          | 163.6          |
| <b>Total</b>                          | <b>755.4</b> | <b>831.1</b> | <b>901.3</b> | <b>1,089.4</b> | <b>1,306.3</b> | <b>1,463.8</b> |
| <b>Percentage breakdowns</b>          |              |              |              |                |                |                |
| Salaries                              | 91.3         | 91.3         | 90.7         | 84.7           | 85.6           | 83.8           |
| School operational                    | 6.3          | 6.5          | 6.4          | 5.9            | 5.3            | 5.0            |
| University support                    | 1.0          | 1.0          | 0.9          | 5.8            | 5.4            | 6.8            |
| Pensions                              | 2.3          | 2.3          | 2.8          | 3.5            | 3.6            | 4.2            |

Note: Figures for 2000–04 are actual expenditures, figures for 2005 are budgeted expenditures.

Source: Department of Finance, MOEHE.



*Sources of Funding.* There are three main sources of donor funding for public education provision in the West Bank & Gaza, namely the UNRWA education program, and budget and project support for MOEHE and other PA education and training programs provided by donors. UNRWA accounted for 20 percent of total (public plus private) expenditure and 25 percent of public education expenditure in 2003, and enrolls 25 percent of children in the basic cycle (grades 1–10).

Despite sizeable annual fluctuations, donor assistance has remained relatively constant at around \$23–\$24 million per annum during the periods 1995–99 and 2000–05. School building and other construction activities absorbed nearly 80 percent of donor support during the 1990s. Since then, however, it has declined to only one-third of total commitments. The share of “other” commitments, which include support to individual projects as well as targeted budget support for the education sector, has increased from just 6 percent during the 1990s to 45 percent since 2000. This has increased the proliferation of uncoordinated expenditure and reduced incentives for the PA to introduce efficiency gains. Curriculum development and textbook production are also a major component of donor assistance, amounting to 21 percent of commitments since 2000 (table 5.5).

**Table 5.5: Financial Commitments of Donor Partners to the Ministry of Education, 1995–2005**  
(millions of dollars)

| Year                  | Constr-<br>uction | Material       | Curri-<br>culum | Capacity   | Training   | Other<br>inc.     | Totals       | Percent           |                |             |
|-----------------------|-------------------|----------------|-----------------|------------|------------|-------------------|--------------|-------------------|----------------|-------------|
|                       |                   | Equip-<br>ment | Text-<br>books  | Building   |            | Budget<br>support |              | Construct-<br>ion | Text-<br>books | Other       |
| 1995                  | 22.6              | 0.1            | 0.8             | 0          | 0.2        | 0.1               | 23.8         | 95.1              | 3.2            | 0.6         |
| 1996                  | 5.4               | 0.3            | 9.6             | 0.3        | 0.3        | 0.9               | 16.8         | 31.9              | 57.5           | 5.2         |
| 1997                  | 53.0              | 1.8            | 0               | 0.7        | 0          | 0.5               | 56.0         | 94.6              | 0              | 0.8         |
| 1998                  | 12.1              | 1.0            | 0               | 0          | 0.1        | 5.9               | 19.1         | 63.3              | 0              | 30.9        |
| 1999                  | 7.5               | 0              | 1.7             | 0          | 2.3        | 0.4               | 11.9         | 34.9              | 25.2           | 6.3         |
| <b>Sub-<br/>total</b> | <b>100.6</b>      | <b>3.2</b>     | <b>12.1</b>     | <b>1.0</b> | <b>2.9</b> | <b>7.8</b>        | <b>127.6</b> | <b>77.9</b>       | <b>9.9</b>     | <b>6.4</b>  |
| 2000                  | 5.5               | 0              | 3.0             | 0          | 0          | 3.0               | 11.5         | 47.8              | 25.7           | 26.5        |
| 2001                  | 27.2              | 1.5            | 1.1             | 0          | 0.5        | 13.1              | 43.4         | 57.8              | 3.0            | 34.2        |
| 2002                  | 6.9               | 0              | 12.4            | 0          | 0.1        | 9.2               | 28.6         | 23.2              | 44.2           | 32.3        |
| 2003                  | 3.3               | 0.1            | 2.9             | 0          | 0          | 37.0              | 43.2         | n.a               | n.a            | n.a         |
| 2004                  | 0                 | 0              | 0               | 0          | 0          | 0                 | 0            | 0                 | 0              | 0           |
| 2005                  | 6.7               | 0              | 12.2            | 0          | 0.1        | 0.5               | 19.5         | 34.4              | 62.8           | 2.4         |
| <b>Sub-<br/>total</b> | <b>49.6</b>       | <b>1.6</b>     | <b>31.6</b>     | <b>0</b>   | <b>0.6</b> | <b>62.8</b>       | <b>146.2</b> | <b>31.9</b>       | <b>21.1</b>    | <b>45.4</b> |
| <b>Total</b>          | <b>150.2</b>      | <b>4.8</b>     | <b>43.7</b>     | <b>1</b>   | <b>3.5</b> | <b>70.6</b>       | <b>273.8</b> | <b>57.2</b>       | <b>15.1</b>    | <b>24.4</b> |

Source: Project Department, MOEHE.

n.a.: data are not available

**Household Expenditure.** The share of private expenditures is high, at 46 percent of all education (including tertiary) expenditures. While education access inequities with regard to income appear to be relatively small, household expenditure on education varies enormously. The poorest households, with total consumption of less than \$284 per month, spend only \$10 per annum on education, while the richest households, with monthly consumption of more than \$1,400, spend over 80 times this amount.

**Expenditure by Type of Education.** The education system in West Bank and Gaza is structured to provide 10 years of basic education and 2 years of secondary. The first cycle is sub-divided. Grades 1 to 4 are designated as the preparation stage and grades 5 to 10 are the empowerment stage. Secondary education comprises two grades, 11 and 12. Absence of a clear separation between basic and secondary among government schools in the West Bank & Gaza makes it difficult to precisely estimate the expenditure breakdown between these two types of schools. Around 77 percent of the MOEHE recurrent budget was allocated to basic and 18 percent to secondary education in 2004/05. Given the relatively long basic schooling cycles and very short secondary schooling cycles in Palestine, international comparisons of sub-sector expenditure breakdowns are not meaningful. Public expenditure on higher education accounts for only 5.6 percent of total MOEHE expenditure on education, which is very low compared to 30 percent for MENA countries and 26.3 percent for OECD countries.

Most tertiary education institutions (TEIs) in Palestine are in serious financial crises. They have had to rely increasingly on cost recovery from student tuition fees, which currently account for around 60 percent of total expenditure. Public funding for tertiary education is of two types: annual subventions to public universities by the Ministry of Finance and direct funding of six government TEIs, which is channeled through MOEHE. The MOF has made a formal commitment to provide \$20 million of core support each year to the TE sector. However, fiscal constraints have meant that only slightly more than one-half of this amount was disbursed between 2002/03 and 2004/05, which amounts to around 5 percent of university recurrent expenditure during this period.

Education expenditure has been expanding very rapidly over the last five years. Private expenditure accounts for almost half of all total expenditure on education, which is a concern given the diminishing capacity of families to pay for services. The MOEHE is heavily reliant on financial support from donors for both budget and project support. In order to keep services running, such arrangements will need to continue for the foreseeable future. A positive point is that the incidence of public expenditure is quite equitable because the share of basic and secondary education is very high compared to tertiary. However, the resource allocation inequities between the Gaza Strip and the West Bank are large.

### **3. Enrollment Trends**

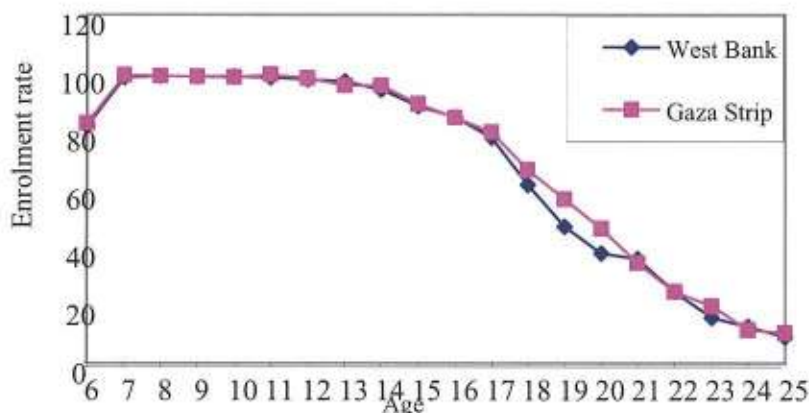
The total population of West Bank and Gaza was estimated by the Palestinian Central Bureau of Statistics (PCBS) to be 3.7 million in 2005, with 52 percent under 18 years of age. However, population projections have recently been adjusted downwards to take into



account much lower than expected inward migration of Palestinians due to the second *intifada*. The latest population growth figure is 3.3 percent per annum, down from 3.8 percent in 1997.<sup>68</sup>

Access to basic and secondary is highly equitable with respect to gender, location (rural and urban), refugee status and household income. According to the 2005 Demographic and Health Survey, enrollment rate profiles are virtually identical in the Gaza Strip and in the West Bank (figure 5.1). Almost all children attend school up until the age of 12. The main enrollment targets set for the 2000–05 MOEHE Education Five-Year Development Plan have been met for both basic and secondary schooling. But this is not the case for the vocational education targets. The goal was to reach 15 percent of the secondary enrollment in the vocational streams, which amounted to only 3 percent in 2005, down from a slight peak of 5 percent in 2003.

**Figure 5.1: Education Enrollment by Age**



Enrollment growth across the 12 school grades has not been even. Enrollments were actually lower in grades 1–3 in 2005/06 than they were in 1999/2000.<sup>69</sup> In contrast, enrollment in grades 10–12 increased by well over 60 percent during the same period. With annual population growth expected to be nearly 4 percent, the 2000–05 education plan projected that the age six population would increase by 24 percent between 1999/2000 and 2004/05. In reality, primary grade enrollments fell by 8 percent compared to a 34 percent increase for the preparatory grades (5–10) and a 55 percent increase for the secondary grades.

<sup>68</sup> Some questions remain about the accuracy of these population projections. A recent demographic study by the Harvard School of Public Health estimates that the population of the Gaza Strip was 1.29 million in late 2005, which is almost exactly 100,000 less than the PCBS projection for this year (Harvard 2005).

<sup>69</sup> It should be pointed out that grade 1 intakes in 1999 were slightly higher than normal due to a change in regulations that enabled children to enroll two months earlier than in previous years.



More research is needed, but there are probably two main reasons for this unexpected fall in enrollment intakes for basic schooling. First, fertility rates may have declined due to the social and economic upheaval of the second *intifada*. Second, emigration rates may have been much higher than expected. A Demographic Survey in Palestine (DSP) reports that, between 2000 and 2004, at least one person had permanently emigrated in 5 percent of households and temporarily migrated in 11 percent of households (2004).

Transition rates from basic to secondary education have been consistently in excess of 90 percent over the last five years, which is high by international standards. If Gross enrollment rate (GER) is calculated using Labor Force Survey (LFS) (2005) and Demographic and household survey (DHS) (2004) data for this age group, then it was 83 to 85 percent. Secondary enrollment rates have increased by 13 percentage points for both females and males since 2000, reaching gender parity for this age group.

***Enrollment in Vocational Schools and Tertiary Education.*** School-based vocational training in the West Bank & Gaza has five streams: industrial, agricultural, commercial, hotel and home economics. Total enrollment for the five streams increased from around 3,000 in 1999/2000 to 5,561 in 2004/05, which is considerably lower than the MOEHE 2000–05 target enrollment figure of 9,000. Part of the reason is that this type of training remains unpopular among most students and parents/guardians.

There is a strong societal expectation in the West Bank & Gaza that all young people have a right to tertiary education. The MOEHE 2000–05 education plan had no explicit access targets for this level of education. The lack of sufficiently detailed survey data makes it difficult to accurately calculate transition rates for students successfully completing secondary education and proceeding to tertiary education. It is estimated that over 80 percent of grade 12 graduates who pass the *Tawjihi* go on to some kind of post-secondary education or training. DHS data indicate that 44 percent of 18–21 year olds were still in full-time education in 2004, which is a very high rate by international comparisons. In 2003 the average found in other Arab states was 15 percent, and in other middle income countries was 21 percent (in Mexico and Costa Rica) and 27 percent (in Malaysia).

#### **4. Equity in the Provision of Education Services**

A close look at allocation of resources shows that there are important regional differences, mainly between West Bank and Gaza, but also among districts. These differences are observed in the number of schools operating double shifts, in student-teacher ratios, and in the availability of libraries and computers in schools, among other things. One of the main factors in how resources are allocated differently between the West Bank and Gaza is population density, though this does not in itself sufficiently explain the considerable regional differences.

***Refugee Status.*** PCBS estimates that 42 percent of the population under 18 years old are refugees. Around two-thirds of children from refugee households attended UNRWA schools (225,000 out of 342,000 in 2001/02), with the remainder attending PA and

private schools. Ten percent of the total enrollment at UNRWA schools is non-refugee children. There are virtually no differences in enrollment rates between children from refugee and non-refugee households. UNRWA schools do not provide services beyond grade 9, but no difficulties are reported in students transferring to government schools to finish their basic cycle.

**Location.** On the basis of the DHS enrollment profiles, as well as Education Management Information System (EMIS) shown in figure 5.1, there are no differences between either location or gender enrollment profiles for basic and secondary education. The only difference in regional enrollment rates is a noticeably higher proportion of young adults (aged 18–20) living in the Gaza Strip enrolled in full-time education in 2004. With a few exceptions, enrollment rates are relatively uniform across the directorates for the basic school age cohorts. However, among the 16–17 age group, they vary markedly from a low of 66.5 percent in Jericho to 99 percent in Jerusalem. Despite these directorate differences, there appear to be no major enrollment disparities between rural and urban areas in the West Bank & Gaza.

## **5. Efficiency in the Use of Human and Financial Resources**

As noted above, education is divided into the preparation stage (grades 1 to 4), the empowerment stage (grades 5 to 10), and the optional secondary education stage (grades 11 and 12). Under ideal circumstances, a child would complete each stage without having to transfer between schools, especially at the preparation stage, when stability is an important factor. However, this is rarely the case in the West Bank & Gaza. There is remarkable diversity of provision with respect to the grade structure of schools. Among schools that offer only the basic grades, barely one-third of government schools have the complete elementary and preparatory cycles. UNRWA schools offer schooling only up to grade 9 and students must shift to government schools to finish their basic cycle.

The lack of correspondence between the schooling cycles, which form the basis for the curriculum and the grade structure of schools, is not only likely to be inefficient from pedagogical and learning perspectives (particularly with so many children having to move schools mid-cycle), but is also likely to raise unit costs.

**School Size.** Government schools in the West Bank & Gaza are quite small by international standards, which has important implications for resource utilization and efficiency. Table 5.6 shows that nearly 20 percent of government schools have fewer than 200 students, compared to only 3 percent among UNRWA schools. Part of the reason for this difference in school size profiles is that UNRWA schools are mainly located in refugee camps with high population densities.



**Table 5.6: School Size Variation by School Ownership and Region, 2004–05**  
(percent of total number of schools)

| Region            | Less than<br>100<br>students | 101–200<br>students | 201–500<br>students | 501–1000<br>student | More than<br>1,000<br>students | Number of<br>schools |
|-------------------|------------------------------|---------------------|---------------------|---------------------|--------------------------------|----------------------|
| <b>West Bank</b>  |                              |                     |                     |                     |                                |                      |
| Government        | 5.5                          | 12.8                | 57.2                | 24.3                | 0.1                            | 1,339                |
| UNRWA             | 4.3                          | 3.2                 | 31.2                | 44.1                | 17.2                           | 93                   |
| Private           | 35.6                         | 23.2                | 30.9                | 8.6                 | 1.7                            | 233                  |
| Total             | 7.0                          | 37.6                | 37.6                | 16.8                | 1.0                            | 1,665                |
| <b>Gaza Strip</b> |                              |                     |                     |                     |                                |                      |
| Government        | 0.9                          | 0.3                 | 18.3                | 69.9                | 10.6                           | 322                  |
| UNRWA             | 0                            | 0                   | 1.7                 | 35.6                | 62.8                           | 180                  |
| Private           | 20.0                         | 32.0                | 20.0                | 24.0                | 4.0                            | 25                   |
| Total             | 1.5                          | 1.7                 | 12.7                | 56.0                | 28.1                           | 527                  |
| <b>Total</b>      |                              |                     |                     |                     |                                |                      |
| Government        | 4.6                          | 10.4                | 49.7                | 33.1                | 2.2                            | 1,661                |
| UNRWA             | 1.5                          | 1.1                 | 11.7                | 38.5                | 47.3                           | 273                  |
| Private           | 34.1                         | 24.0                | 29.8                | 10.1                | 1.9                            | 258                  |
| Total             | 7.7                          | 10.9                | 42.6                | 31.1                | 7.8                            | 2,192                |

Source: EMIS.

Population densities are very different in the West Bank and Gaza Strip. There are 640 population concentrations in the West Bank, compared to only 40 in the Gaza Strip. The number of individuals per square kilometer is 300 and 5,000, respectively. In addition, the impact of the occupation and closures has meant that de facto school catchment areas have become much smaller, since parents are reluctant to allow their children to attend schools outside their immediate localities (especially when it involves crossing Israeli checkpoints). The predominance of single-sex schools is another important factor contributing to small schools, as only 31 percent of schools are coeducational.

**Class Size.** Relatively small class size is a key feature of government schools in the West Bank. In 2004/05, 41 percent of classes had 30 students or less and only 18 percent had more than 40 students. By contrast, the Gaza Strip had 6 percent of classes with 30 students or less and 56 percent with more than 40 students. As expected given the differences in school size, smaller classes are much less common in UNRWA schools in the West Bank and are virtually non-existent in the Gaza Strip.

**Student-Teacher Ratios.** The complex pattern of school grade profiles makes it difficult to analyze student-teacher ratios in Palestine. The student-teacher ratio for government schools that have only grades 1–10 is 28. It is slightly higher, at 30, for elementary only schools (grades 1–4). Student-teacher ratios at both types of basic schools are appreciably higher in Gaza than in the West Bank. Student-teacher ratios in secondary schools offering only grades 11 and 12 were much lower—around 19 in the West Bank and 24 in the Gaza Strip. As shown in table 5.7, primary school student-teacher ratios in the West Bank & Gaza are relatively high compared to MENA, which has a low average, but are relatively low compared to low-income countries.



**Table 5.7: Ratio of Students to Teachers in Primary Global Data**

|                                   | Weighted average |
|-----------------------------------|------------------|
| <b>West Bank &amp; Gaza, 2004</b> | 28.0             |
| Low and middle income             | 27.9             |
| Low income                        | 42.6             |
| Lower middle income               | 21.9             |
| Upper middle income               | 18.7             |
| High income                       | 14.0             |
| <b>Region, 2003</b>               |                  |
| Sub-Saharan Africa                | 44.7             |
| East Asia and Pacific             | 30.6             |
| Europe and Central Asia           | 17.5             |
| Latin America and Caribbean       | 25.1             |
| Middle East and North Africa      | 21.9             |
| South Asia                        | 40.9             |

Note: West Bank & Gaza, grades 1–4, 2004.

Source: EdStats 2003.

**Analysis of Unit Costs-Salary Expenditures.** The main education expenditure is salaries. MOEHE EMIS defines teachers as, “all teaching and non-teaching staff in school except service employees and janitors.” According to this definition, a total of 45,892 teachers were employed in 2004/05 throughout Palestine, with 73 percent employed in the PA, 17 percent in UNRWA, and 10 percent in private schools. The number of government teachers has increased considerably in the past five years, growing 36 percent between 1999/2000 and 2004/05; UNRWA and private schools also registered increases of 25 percent and 17 percent, respectively. MOF payroll data indicates that 29,763 teachers were working at government schools in August 2005 supported by 1,518 school managers and 5,135 other support staff. The number of support staff (for which there is no clear definition of roles) has increased by almost four times in the past four years.

Table 5.8 shows that the number of administrative and support staff at PA schools is much higher than at UNRWA schools. In fact, viewed in proportion to front line service providers, the PA employs twice as many support staff as UNRWA.

Given the current situation, every effort is made to post teachers in or very near to their home areas. Teacher attrition is minimal. Transfers of teachers between districts are also reported to be negligible, but intra-district transfers are more common. As a result of closures and other travel restrictions, senior MOEHE planners report that more than half the teachers at government schools have had to be relocated. The downside is that many of them have to teach subjects for which they are not qualified. However, the practice has benefits, in that it has probably enhanced informal social accountability. Education is reported to have encountered the least problems with absenteeism in the midst of the severe fiscal crisis in 2006. Where necessary, teachers are shared among schools, but multi-grade teaching is not practiced.

**Table 5.8: Total School Employment by Ownership and Region, 2004/05**

| Region            | Administrative Staff | Teachers | Others |
|-------------------|----------------------|----------|--------|
| <b>West Bank</b>  |                      |          |        |
| Government        | 3,783                | 20,558   | 1,846  |
| UNRWA             | 121                  | 1,957    | 133    |
| Private           | 554                  | 3,272    | 678    |
| <b>Gaza Strip</b> |                      |          |        |
| Government        | 998                  | 9,031    | 691    |
| UNRWA             | 298                  | 5,629    | 288    |
| Private           | 68                   | 522      | 120    |
| <b>Total</b>      |                      |          |        |
| Government        | 4,781                | 28,589   | 2,536  |
| UNRWA             | 419                  | 7,586    | 421    |
| Private           | 622                  | 3,793    | 798    |

Note: Head office and directorate staff are not included in these figures.

Source: EMIS.

**Unit Costs for Basic Education.** Student-teacher ratios in the West Bank & Gaza are likely to be reasonably good indicators of recurrent unit costs. This is because salary costs account for 90 percent of total recurrent costs, other MOEHE resources are equitably distributed to all schools regardless of location and school income (principally from fees) only accounts for a very small proportion of total school expenditures.

**Table 5.9: Annual Expenditure per Student (unit costs) by Type of Education**  
(dollars)

|                               | Average teacher salary | Teacher unit costs | Personnel unit cost | Operational unit cost | Overall unit cost |
|-------------------------------|------------------------|--------------------|---------------------|-----------------------|-------------------|
| Government schools (mid-2005) | 6,882                  | 281                | 343                 | 27                    | 370               |
| UNRWA teaching staff (2004)   | 9,917                  | n.a                | 329                 | 16                    | 345               |
| Government TVET               | 10,312                 | n.a                | n.a                 | n.a                   | n.a               |
| UNRWA TVET                    | n.a                    | n.a                | 2,438               | 1,468                 | 3,906             |

n.a: not available

Source: MOEHE and MOF.

According to the MOEHE 2000–05 education plan, average annual expenditure per student (in other words, the overall unit cost) at government schools was \$283 in 1999/2000 and was projected to rise to \$370 in 2004/05 in 1999 prices. Table 5.9 shows that, even though UNRWA teacher salaries are over 40 percent higher than PA teacher salaries, there is little difference in personnel unit costs at government and UNRWA schools, mainly because of the much larger numbers of support staff employed by MOEHE.<sup>70</sup> The unit student costs at government schools need to be adjusted downwards slightly, although probably by no more than 2–3 percent, taking into consideration that

<sup>70</sup> Expenditure per student at UNRWA schools in the West Bank and Gaza Strip were \$393 and \$331 respectively in 2004.



MOEHE staff perform functions (most notably curriculum development and examinations) that are not undertaken by UNRWA education personnel.

**Comparison between United Nations Relief and Works Agency and Palestinian Authority Basic Schools Unit Costs.** Overall unit costs were \$370 in 2005/06. For UNRWA schools, they were \$345 in 2004 and \$391 (provisionally) in 2005. Unit costs for government schools have increased by 32 percent since 1999/2000, a figure largely consistent with the 30 percent increase for UNRWA schools between 2002 and 2005. Up to date information on unit costs in MENA countries is not available. However, 2001 UNESCO data tentatively indicate that unit costs are higher in Palestine than in Jordan, Morocco and Tunisia, but considerably lower than in Syria. In summary, with better learning outcomes and lower unit costs, UNRWA schooling could be more cost-effective.

**Table 5.10: Key Input Efficiency Parameters by School Ownership**

| School owner                    | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 |
|---------------------------------|---------|---------|---------|---------|---------|
| <b>PA</b>                       |         |         |         |         |         |
| Student-teacher ratio           | 23.3    | 23.2    | 22.3    | 22.7    | 26.3    |
| Average class size              | 37.7    | 36.5    | 35.1    | 34.7    | 34.3    |
| Average school enrollment       | 505.8   | 506.9   | 500.1   | 505.8   | n.      |
| Average school shift enrollment | 455.0   | 456.9   | 444.7   | 455.5   | n.a     |
| <b>UNRWA</b>                    |         |         |         |         |         |
| Student-teacher ratio           | 35.8    | 34.9    | 32.2    | 33.6    | 33.4    |
| Average class size              | 39.4    | 40.8    | 44.6    | 43.4    | 42.4    |
| Average school enrollment       | 1,208.1 | 1,199.3 | 1,261.3 | 1,246.6 | n.a     |
| Average school shift enrollment | 832.8   | 842.4   | 878.9   | 859.7   | n.a     |
| <b>Private</b>                  |         |         |         |         |         |
| Student-teacher ratio           | 15.3    | 14.2    | 14      | 13.7    | 16.7    |
| Average class size              | 25.7    | 23.8    | 23.6    | 23.9    | 23.9    |
| Average school size             | 153.4   | 237.2   | 225.2   | 232.2   | n.a     |

n.a: not available

**Cost Efficiency of Technical and Vocational Education and Training Institutions.** Vocational schools present an important challenge in terms of cost-efficiency and effectiveness. Since their costs are 10 times more than traditional schools, there is limited demand for them, and their graduates often do not find jobs. The activity profiles every month of secondary industrial school graduates between the beginning of 2002 and the end of 2005 shows that, for 56 percent of secondary industrial school and 31 percent of technical college graduates, their current employment is “completely unrelated” to their training specialization. These percentages are particularly high for some specializations, notably computer maintenance, automotive mechanics, industrial electronics and automotive electrics. The most striking feature of this profile is that around one-half of all graduates enroll in full-time degree and diploma level courses at higher education institutions for two to three years rather than finding training-related employment. On graduating from college, over 70 percent of female graduates were unable to find jobs during their first six months in the labor market. While this figure declined over time, over half were still unemployed during the latter half of 2005. In contrast, unemployment rates among male college graduates have been much lower; only 11 percent were unemployed in late 2005. Nearly 85 percent of males were in some kind of employment



(either waged or self-employed) compared to only slightly more than 40 percent among the female graduates.

The Directorate of Technical and Vocational Education and Training estimates that the annual operational unit cost for secondary industrial schools is currently \$1,707, which is 4.6 times higher than for academic schools. Inclusive of building and equipment depreciation, this sum increases to \$2,510. The average unit cost for the four UNRWA vocational and teacher training colleges that are located in Palestine was \$3,906 in 2005, which is 10 times greater than the unit costs at UNRWA basic schools.<sup>71</sup>

## 6. Quality and Relevance of Education Outcomes

The combination of very rapid expansion of basic and secondary education with the effects of the ongoing conflict on the school system has led to a widespread perception that the quality of education is declining in the West Bank & Gaza. If learning outcomes are taken as a measure of educational quality, then on the basis of national test results this seems to be the case. To a certain extent this is not surprising, considering the difficult environment in which schools must to operate. A decline in the quality of services is observed in most countries when education policies focus on expansion without taking into account the need to sustain and improve quality. The Palestinian education system has reached a turning point in which it is critical to introduce policy changes geared towards building on the achievements of the earlier rapid expansion and focusing on quality improvement.

**Relevance of Education.** In addition to the uneven achievements, there are critical issues related to the relevance of education. There is serious imbalance among the three streams in upper secondary education. The shrinking student participation in the scientific stream is especially worrying due both to supply and demand factors and constraints. Conversely, the literary stream continues to grow in terms of student enrollments, which raises serious doubts in terms of both quality and relevance. The growing imbalance in secondary enrollments has two important consequences. First, it reduces the size of the potential pool of candidates entering science and technology programs in higher education, thus “exporting” the imbalance to that sector of the education system. Second, it increases the percentage of students in the literary stream who leave secondary school with no qualification or skills. These problems become even more serious when considering that vocational education is not a real option for secondary school students (its enrollment share was down to 3 percent in 2005). Therefore, tackling the imbalance and its effects requires changes in the curriculum policy of basic and secondary education and the—already planned—reform of vocational education at the secondary and tertiary levels. It would also demand reviewing the current admission system to higher education, the courses of study offered at both universities and community colleges and student financial aid policies.

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<sup>71</sup> The Gaza Vocational Training Centers (VTC) has unit costs of \$2,261 and the average unit cost for the three post-secondary training institutions in the West Bank is \$5,261.

With a high (91 percent) adult literacy rate, Palestinians are the most educated population in the MENA region. However, as in other countries in the region, an educated workforce is not correlated with economic productivity. There are important mismatches between education profiles and the labor market, with substantive gender differences. Female participation in the skilled labor force is low, even though women represent about 50 percent of enrollments in tertiary education. Unemployment among male university graduates is lower than for those with only elementary or secondary school, showing that for males there are substantial private rates of return to higher education. However, unemployment for women with university degrees is 34 percent. It is obvious that to obtain wage employment, university graduates have an advantage, regardless of the relevance of their knowledge or skills to the job profile. With public service being the main source of employment, and very limited possibilities for private sector development, the high rates of enrollment in higher education, in particular in education sciences, are understandable, as the Ministry of Education is the largest employer in the PA. However, this leads to an oversupply of graduates; for example, there were over 25,000 graduate applicants for 2,200 new teaching jobs advertised by the MOEHE in 2005.

## 7. Education Funding Requirements

This section examines the funding requirements for the education sector and the likely availability of government and other funding to meet these needs. This represents an attempt to estimate the funding requirements based on the assumption that the current levels of expansion of the sector will be maintained, and that increased enrollments in secondary education would be a main goal for the upcoming years.

Given current enrollment patterns in the West Bank & Gaza, the key parameters that will determine future school enrollments are the growth in the intake population for basic schools, grade repetition and dropout rates and the target enrollment rate for the secondary school grades. In view of the considerable uncertainty that exists concerning future population growth rates, school enrollment projections have been modeled under two scenarios. The first is that the school intake population grows annually at an average rate of 4 percent over the next five years and the other that this rate of intake growth is half this level at only 2 percent a year.<sup>72</sup> The grade 1 net intake rate is assumed to remain at 100 percent for the foreseeable future. A reasonable target for the next five year plan is to achieve universal basic education for all, with 100 percent completion of ten years of education by the end of the plan in 2010. Two scenarios have therefore been adopted with respect to repetition and dropout rates: both rates will remain at their current levels for all grades for the next 10 years; and they will gradually decline to zero by the end of 2009 as a result of more extensive safety nets, better learning outcomes and a marked improvement in the economic and security situation.

<sup>72</sup> According to the revised PCBS population projections, the average annual growth rate for the year-six population will be 3.5 percent between 2005–10.



**Projected Enrollments for Primary and Secondary.** The enrollment projections for these different scenarios are presented in table 5.11.<sup>73</sup> What is striking is that, regardless of the population growth and repetition/dropout scenario, enrollment growth for basic schooling is only projected to increase by 6–10 percent between 2005/06 and 2010/11. In contrast, secondary grade enrollments are projected to increase by 40–47 percent over this period (these estimates vary little from one scenario to another). The overall increase in school enrollments is only 10–14 percent depending on the projection scenario. Basic school enrollments will only grow slowly because enrollment rates for grades 1–10 are already nearly 100 percent, so it is only intake growth that leads to higher enrollments. For the secondary grades, however, enrollment rates are considerably lower, and therefore enrollments will increase quite rapidly as the target enrollment rate of 100 percent is attained during the next five years.<sup>74</sup>

**Table 5.11: Projected Basic and Secondary Grade Enrolments,  
2005/06 and 2010/11**

|                                     | 2005/06 | 2010/11 | Increase | Percent increase |
|-------------------------------------|---------|---------|----------|------------------|
| <b>Basic schooling</b>              |         |         |          |                  |
| <b>2% Per Annum Intake Growth</b>   |         |         |          |                  |
| No change in repetition and dropout | 950     | 104     | 54       | 6                |
| Zero repetition and dropout by 2009 | 938     | 990     | 52       | 6                |
| <b>4% Per Annum Intake Growth</b>   |         |         |          |                  |
| No change in repetition and dropout | 952     | 1,049   | 97       | 10               |
| Zero repetition and dropout by 2009 | 946     | 1,035   | 89       | 9                |
| <b>Secondary schooling</b>          |         |         |          |                  |
| <b>2% Per Annum Intake Growth</b>   |         |         |          |                  |
| No change in repetition and dropout | 126     | 183     | 57       | 45               |
| Zero repetition and dropout by 2009 | 128     | 187     | 59       | 46               |
| <b>4% Per Annum Intake Growth</b>   |         |         |          |                  |
| No change in repetition and dropout | 129     | 183     | 54       | 42               |
| Zero repetition and dropout by 2009 | 128     | 187     | 59       | 46               |
| <b>Total enrollment</b>             |         |         |          |                  |
| <b>2% Per Annum Intake Growth</b>   |         |         |          |                  |
| No change in repetition and dropout | 1,076   | 1,187   | 111      | 10               |
| Zero repetition and dropout by 2009 | 1,066   | 1,177   | 111      | 10               |
| <b>4% Per Annum Intake Growth</b>   |         |         |          |                  |
| No change in repetition and dropout | 1,081   | 1,232   | 151      | 14               |
| Zero repetition and dropout by 2009 | 1,074   | 1,222   | 148      | 14               |

Note: Figures are rounded to the nearest thousand.

**Funding Requirements for Teachers and Classrooms.** Table 5.12 presents total recurrent funding requirements for each scenario for 2005/06 and 2010/11 assuming no changes in current unit costs for basic and secondary education. The average annual rate

<sup>73</sup> The Harvard School of Public Health study models future school enrollments for the Gaza Strip, but these seem to be based on inconsistent population growth estimates. On the one hand, the population aged 0–4 is projected to grow by almost five percent a year between 2005–10 but, on the other hand, the age 6 intake population used to make enrollment projections is projected to increase by only 1.2 percent (from 38,913 to 39,365) during this period.

<sup>74</sup> A study by the Rand Corporation on the future Palestinian state estimates that basic school enrollments will increase by 29 percent and secondary school enrollments will increase by 44 percent between 2005 and 2010.

of recurrent expenditure growth is 2.0–2.5 percent during this period, which is much less than the 11.4 percent rate of annual growth between 1999/2000 and 2004/05. It is important to note that, assuming no changes in the student-teacher ratio, the number of new teaching posts and additional classrooms needed to cater for enrollment growth actually declines appreciably for all but one of the four scenarios. The additional funding requirements for expanding secondary, while maintaining the current enrollments in primary, are \$35 million per year, much lower than what the increase in the past five years has been. The good news is that with 2 percent intake growth, between 515–850 fewer teacher posts will be required in 2010/11 than in 2005/06. An average of 213 teachers (0.8 percent of the total in post) will reach the compulsory retirement age of 60 each year over the next four years.

**Table 5.12: Recurrent Funding Requirements under Four Scenarios**  
(millions of dollars)

|  | 2005/06 | 2010/11 | Increase | Percent increase |
|--|---------|---------|----------|------------------|
| <b>Basic schooling</b>                   |         |         |          |                  |
| <b>2 Percent Per Annum Intake Growth</b> |         |         |          |                  |
| No change in repetition and dropout      | 261.3   | 276.1   | 14.9     | 6                |
| Zero repetition and dropout by 2009      | 258.0   | 272.3   | 14.3     | 6                |
| <b>4 Percent Per Annum Intake Growth</b> |         |         |          |                  |
| No change in repetition and dropout      | 261.8   | 288.5   | 26.7     | 10               |
| Zero repetition and dropout by 2009      | 260.2   | 284.6   | 24.5     | 9                |
| <b>Secondary schooling</b>               |         |         |          |                  |
| <b>2 Percent Per Annum Intake Growth</b> |         |         |          |                  |
| No change in repetition and dropout      | 44.7    | 65.0    | 20.2     | 45               |
| Zero repetition and dropout by 2009      | 45.4    | 66.4    | 20.9     | 46               |
| <b>4 Percent Per Annum Intake Growth</b> |         |         |          |                  |
| No change in repetition and dropout      | 45.8    | 65.0    | 19.2     | 42               |
| Zero repetition and dropout by 2009      | 45.4    | 66.4    | 20.9     | 46               |
| <b>Total recurrent expenditure</b>       |         |         |          |                  |
| <b>2 Percent Per Annum Intake Growth</b> |         |         |          |                  |
| No change in repetition and dropout      | 306.0   | 341.1   | 35.1     | 11               |
| Zero repetition and dropout by 2009      | 303.4   | 338.6   | 35.2     | 12               |
| <b>4 Percent Per Annum Intake Growth</b> |         |         |          |                  |
| No change in repetition and dropout      | 307.6   | 353.4   | 45.8     | 15               |
| Zero repetition and dropout by 2009      | 305.6   | 351.0   | 45.4     | 15               |

Source: calculated for this report.

**Capital Expenditure.** Assuming no change in the current class size norm of 35, the additional number of classrooms required to accommodate net enrollment growth will decrease from 750–1050 in 2006/07 (depending on scenario) to 430–860 in 2010/11 (see table 5.14). The current average unit cost of adding a classroom to an existing school is \$16,000 in the Gaza Strip and \$35,000 in the West Bank. The corresponding costs for building a classroom in a new school are \$28,000 and \$47,000.<sup>75</sup> Given the size of these cost differences, it is not possible to make robust capital expenditure projections without

<sup>75</sup> Further investigation is needed to explain these very large differences in classroom unit costs in Gaza Strip and the West Bank.



more detailed information on the location and type of classroom construction (in old and new schools). A new priority setting process for school construction is needed that is both transparent and equitable. New schools are most urgently needed where there are serious safety concerns about existing buildings and facilities and in order to prevent triple shifting and double shifting (particularly in Gaza).

**Table 5.13: Projected Recurrent Expenditure for Basic and Secondary Schooling,  
2005/06–2010/11**  
(millions of dollars)

|  | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|--|---------|---------|---------|---------|---------|---------|
| <b>Basic schooling</b>                   |         |         |         |         |         |         |
| <b>2 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      | 261.3   | 265.9   | 268.7   | 271.2   | 272.5   | 276.1   |
| Zero repetition and dropout by 2009      | 258.0   | 261.3   | 271.4   | 265.4   | 268.4   | 272.3   |
| <b>4 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      | 261.8   | 267.9   | 272.3   | 276.7   | 281.6   | 288.5   |
| Zero repetition and dropout by 2009      | 260.2   | 262.9   | 266.2   | 270.9   | 276.9   | 284.6   |
| <b>Secondary schooling</b>               |         |         |         |         |         |         |
| <b>2 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      | 44.7    | 51.1    | 57.9    | 61.8    | 64.3    | 65.0    |
| Zero repetition and dropout by 2009      | 45.4    | 51.1    | 57.9    | 62.8    | 65.7    | 66.4    |
| <b>4 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      | 45.8    | 51.1    | 57.5    | 61.8    | 64.3    | 65.0    |
| Zero repetition and dropout by 2009      | 45.4    | 51.1    | 58.2    | 62.8    | 65.7    | 66.4    |
| <b>Total recurrent expenditure</b>       |         |         |         |         |         |         |
| <b>2 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      | 306.0   | 317.0   | 326.5   | 332.9   | 336.8   | 341.1   |
| Zero repetition and dropout by 2009      | 303.4   | 312.4   | 329.3   | 328.2   | 334.1   | 338.6   |
| <b>4 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      | 307.6   | 319.0   | 329.8   | 338.4   | 345.9   | 353.4   |
| Zero repetition and dropout by 2009      | 305.6   | 314.0   | 324.4   | 333.7   | 342.6   | 351.0   |

**Table 5.14: Projected Total Teacher Post-Requirements, 2005/06–2010/11**

| Per Annum Intake Growth                  | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|--|---------|---------|---------|---------|---------|---------|
| <b>2 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      | 46,180  | 47,682  | 48,927  | 49,785  | 50,300  | 50,944  |
| Zero repetition and dropout by 2009      | 45,751  | 46,953  | 49,356  | 49,013  | 49,828  | 50,515  |
| <b>4 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      | 46,395  | 47,983  | 49,442  | 50,644  | 51,717  | 52,876  |
| Zero repetition and dropout by 2009      | 46,094  | 47,210  | 48,584  | 49,871  | 51,159  | 52,446  |
| <b>Extra Posts Required</b>              |         |         |         |         |         |         |
| <b>2 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      |         | 1,502   | 1,245   | 858     | 515     | 644     |
| Zero repetition and dropout by 2009      |         | 1,202   | 2,403   | –343    | 815     | 687     |
| <b>4 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      |         | 1,588   | 1,459   | 1,202   | 1,073   | 1,159   |
| Zero repetition and dropout by 2009      |         | 1,116   | 1,373   | 1,288   | 1,288   | 1,288   |

Note: Assumes overall student-teacher ratio of 23.3 (actual 2003/04 latest year available).

Source: calculated for this report

**Table 5.15: Projected Classroom Requirements for Basic and Secondary Schooling, 2005/06–2010/11**

| Per Annum Intake Growth                  | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|--|---------|---------|---------|---------|---------|---------|
| <b>2 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      | 30,743  | 31,743  | 32,571  | 33,143  | 33,486  | 33,914  |
| Zero repetition and dropout by 2009      | 30,457  | 31,257  | 32,857  | 32,629  | 33,171  | 33,629  |
| <b>4 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      | 30,886  | 31,943  | 32,914  | 33,714  | 34,429  | 35,200  |
| Zero repetition and dropout by 2009      | 30,686  | 31,429  | 32,343  | 33,200  | 34,057  | 34,914  |
| <b>Additional Classrooms Each Year</b>   |         |         |         |         |         |         |
| <b>2 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      |         | 1,000   | 829     | 571     | 343     | 429     |
| Zero repetition and dropout by 2009      |         | 800     | 1,600   | –229    | 543     | 457     |
| <b>4 Percent Per Annum Intake Growth</b> |         |         |         |         |         |         |
| No change in repetition and dropout      |         | 1,057   | 971     | 800     | 714     | 771     |
| Zero repetition and dropout by 2009      |         | 743     | 914     | 857     | 857     | 857     |

Note: Assumes class size of 35.

**Funding Availability.** Based on these projections, the average annual rate of recurrent expenditure growth is estimated to be between 2.0 and 2.5 percent over the next five years, which is much less than the 11.4 percent rate of annual growth between 1999/2000 and 2004/05. Assuming no changes in the student-teacher ratio, the number of new teaching posts and additional classrooms needed to cater for enrollment increases declines appreciably for all but one of the four scenarios. With 2 percent intake growth, between 515 and 850 fewer teacher posts will be required in 2010/11 than in 2005/06.



Similarly, assuming no change in the current class size norm of 35, the number of additional classrooms required to accommodate net enrollment growth will decrease from 750–1050 in 2006/07 (depending on scenario) to 430–860 in 2010/11.

## 8. Conclusions and Challenges Ahead

The progress made on basic educational indicators in the West Bank & Gaza is remarkable—particularly considering the circumstances under which it was achieved. However, the combination of very rapid expansion of basic and secondary education with the effects of the ongoing political conflict on the school system has led to a widespread perception that the quality of education is declining in Palestine. Based on national and international tests results, this seems to be the case. To a certain extent this is not surprising, taking into consideration the difficult environment in which schools have to operate. In many countries, this outcome is also not unusual when education policies focus on expansion without taking into account the need to improve quality. The Palestinian education system has now reached that turning point in which it is critical to introduce policy changes geared towards building on the achievements of the rapid expansion and focusing on quality improvement.

The discussion below summarizes the major issues and tradeoffs emerging from this chapter. Box 5.1 below provides a more condensed summary of the main policy recommendations.

***Educational Relevance and Effectiveness.*** Perhaps the most pressing issues to be addressed are related to the relevance of the education provided in Palestine. The expansion of secondary education has been unbalanced, as almost three out of four students who pass the *Tawjihi* exam are going into the literary stream and those in scientific streams are becoming a minority. This trend has an obvious impact on patterns of student demand for tertiary education and clearly explains the unbalances in tertiary enrollments, (for example, shortage of science and technology students and overcrowding of faculties of humanities, social science and education).

There are also concerns that the PA is over-investing in technical and vocational education. Old-fashioned vocational training, with narrow specialization and extremely low labor insertion for graduates, is obviously not the way forward. Increased emphasis on comprehensive secondary schooling and a diversified tertiary education system with advanced vocational training is a priority. Just as formal basic and secondary schooling should be parts of a unified system, post-secondary school education and training need to be developed as a system. The poor articulation (particularly with respect to learning pathways) between tertiary and TVET institutions needs to be addressed. The challenge is to develop a common framework of skill levels and related qualifications which a diverse range of training and other specialist service institutions are accredited to offer. The primary focus of post-secondary education should be preparation for skilled employment in the formal sector, but given the importance that is attached to private sector development, every effort should be made to encourage higher levels of self-employment in viable enterprises.